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NOTICE OF ALLOWANCE AND FEE(S) DUE

21254

7590

12/12/2008

MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817

EXAMINER				
ROJAS, BERNARD				
ART UNIT	PAPER NUMBER			

2832 DATE MAILED: 12/12/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,435	12/14/2005	Yoshinobu Honkura	F05-422-US	8783

TITLE OF INVENTION: ANISOTROPIC BOND MAGNET FOR FOUR-MAGNETIC-POLE MOTOR, MOTOR USING THE SAME, DEVICE FOR

ORIENTATION PROCESSING OF ANISOTROPIC BOND MAGNET FOR FOUR-MAGNETIC-POLE MOTOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/12/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 21254 7590 12/12/2008 Certificate of Mailing or Transmission MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817 (Depositor's name (Signature (Date APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 10/560,435 12/14/2005 Yoshinobu Honkura F05-422-US 8783 TITLE OF INVENTION: ANISOTROPIC BOND MAGNET FOR FOUR-MAGNETIC-POLE MOTOR, MOTOR USING THE SAME, DEVICE FOR ORIENTATION PROCESSING OF ANISOTROPIC BOND MAGNET FOR FOUR-MAGNETIC-POLE MOTOR APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 03/12/2009 **EXAMINER** ART UNIT CLASS-SUBCLASS ROJAS, BERNARD 2832 335-302000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD			ROJAS, BERNARD		
			ART UNIT	PAPER NUMBER	
SUITE 200 VIENNA, VA 22182-3817		2832			
		DATE MAILED: 12/12/2008			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 518 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 518 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/560,435	HONKURA ET AL.	
Notice of Allowability	Examiner	Art Unit	
	BERNARD ROJAS	2832	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Report of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED ir or other appropriate commu IGHTS. This application is s and MPEP 1308.	nthis application. If not included unication will be mailed in due course. TH	
2. ☑ The allowed claim(s) is/are <u>18-33</u> .	 -		
3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	e been received. e been received in Application	n No	ne
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subminformal patent APPLICATION (PTO-152) which give	MENT of this application. itted. Note the attached EXA	AMINER'S AMENDMENT or NOTICE OF	
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") mus (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1)	st be submitted. son's Patent Drawing Reviev . s Amendment / Comment or	v (PTO-948) attached in the Office action of	
each sheet. Replacement sheet(s) should be labeled as such in to 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATE	ERIAL must be submitted. Note the	
 Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO/SB/08),	6. ☐ Interview S Paper No./ 7. ☑ Examiner's	formal Patent Application ummary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allowance -	

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 12142005 03102006 04132006 09122007 08062008.

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DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows: CANCEL claims 10-17.

Election/Restrictions

Applicant's election without traverse of Group II, claims 18-33 in the reply filed on 08/05/2008 is acknowledged.

This application is in condition for allowance except for the presence of claims 10-17 directed to Group I non-elected without traverse. Accordingly, claims 10-17 have been cancelled.

Allowable Subject Matter

Claims 18-33 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not teach nor suggest, in the claimed combination, an alignment process apparatus for manufacturing, by molding using a a die, a hollow cylindrical-shaped anisotropic bonded magnet for use in a 4-pole motor wherein the apparatus has two different dice structures wherein magnetic coils are used to impart the magnetic field to

the magnet mold wherein No. 1 one dice, comprising of a magnetic body divided into quarters forming an aligning magnetic field in the normalized direction of the cavity, disposed on the outer periphery of the core and facing the center of the core; No.2 two dice divided into quarters, comprising a non-magnetic body disposed on the outer periphery of the core and facing the center of the core, and, corresponding to the transition region in which the direction of the magnetic poles of the bonded magnet changes, located between the adjacent No. 1 dice; coils conferring magnetic flux on the four No. 1 dice.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Tanigawa et al. [US 4,604,042] is an apparatus for producing anisotropic magnets [figure 1] but lacks the use of magnetic coils or a two dice configuration.
- Masuzawa et al. [US 6,992,553] is a magnetic filed molding apparatus
 [figures 17a-17c] that lacks the use of two separate dice types to shape the
 magnetic field applied to the magnetic material.
- Honkura et al. [US 2006/0113857] is a magnetic filed molding apparatus
 [figures 5-7] that lacks the use of two separate dice types to shape the
 magnetic field applied to the magnetic material.

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 Watanabe et al. [US 4,185,262] is an apparatus for producing anisotropic magnets [figure 3] but lacks the use of magnetic coils or a two dice configuration.

- Shimizu et al. [US 4,547,758] is a magnetic filed molding apparatus [figure 2]
 that lacks the use of two separate dice types to shape the magnetic field
 applied to the magnetic material.
- Komuro et al. [US 2003/0160674] is a magnetic filed molding apparatus
 [figure 1] that lacks the use of two separate dice types to shape the magnetic
 field applied to the magnetic material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BERNARD ROJAS whose telephone number is (571)272-1998. The examiner can normally be reached on M and W-F, 10:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

/Elvin G Enad/ Supervisory Patent Examiner, Art Unit 2832

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Br /Bernard Rojas/ Examiner, Art Unit 2832